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09/881,697	06/18/2001	Hiroshi Iizuka	P100158-00034	8595

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EXAMINER
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MAKI, STEVEN D

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 01/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/881,697

Applicant(s)

IIZUKA ET AL.

Examiner

Steven D. Maki

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 6, 10, 13 and 19-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6, 10, 13 and 19-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

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- 1) The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

- 2) Claims 6, 10, 13 and 19-28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In claims 6, 10 and 13, the subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention (i.e. the new matter) is the subject matter of the side wall portion contacting the tread portion. Although the original disclosure describes a tread portion 1 and a sidewall portion 2, the original disclosure fails to teach "contacting" the rubber composition of the tread portion and the rubber composition of the sidewall portion.

Applicant argues that figure 1 clearly depicts a sidewall portion of the pneumatic tire contacting a shoulder of the tread portion. Applicant's argument is not understood since figure 1 fails to illustrate contacting of the sidewall portion and tread portion. Where is the contacting in figure 1?

In claims 6, 10 and 13, the subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention (i.e. the new matter) is the subject matter of at least one interior main groove

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being located at the center of the said tread portion. Figure 1 shows one rib 8 at the tread center (i.e. the equatorial plane) instead of one groove, two grooves, etc.

Applicant argues that figures 1, 2 and 3 depict at least one interior main groove 7a of the plurality of main grooves 7a, 7b being located at the center of the tread portion 1. Applicant is incorrect. Figure 1 illustrates rib 8 being *at* the center of the tire. Groove 7a is *between* the center *and* groove 7b instead of being *at* the center.

In claims 6, 10 and 13, the subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention (i.e. the new matter) is the omission of the thin rib being near the shoulder.

The original disclosure teaches locating the thin rib in a groove having outwardly inclined walls near the shoulder instead of the near the center. Furthermore, the original disclosure does not show how a thin rib can be located near a center while at the same time maintaining the limitation of "a space between said thin rib and said first groove wall being larger than a space between said thin rib and said second groove wall"; it being emphasized that the only support for the quoted limitation is figures 1-3 which require the thin rib to be located near the shoulder.

With respect to the omission of the thin rib being near the shoulder, applicant refers to rib 9 shown in figure 1 and 2. Figures 1 and 2 require the thin rib 9 to be near the shoulder and fail to illustrate that applicant contemplated moving the rib 9 to the other side of the main groove 7b. Applicant also refers to the paragraph beginning at page 5 line 20 of the specification. This portion of the specification describes the thin rib 9 being along the groove wall W2 near the shoulder instead of moving the thin rib 9 to the other side of the main groove 7b.

With respect to the 112 first paragraph rejections, applicant appears to argue that since new claim 6 reads on the original disclosure, the subject matter in new claim 6 cannot be new matter per se. With respect to claims 6, 10 and 13, the proper standard for 35 USC 112 first paragraph is whether the subject matter was described in the specification in such a way as to reasonably convey to one skilled in the relevant art that

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the inventor(s), at the time the application was filed, had possession of the claimed invention instead of whether the subject matter reads on the original disclosure.

3) The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4) Claims 6, 10, 13 and 19-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 6, 10 and 13, it is unclear what subject matter is required by the sidewall portion "contacting" the tread portion. Does the description of "contacting" in claims 6, 10 and 13 exclude a wing rubber between the tread portion and the sidewall portion?

Applicant argues that figure 1 illustrates a sidewall portion 2 of the pneumatic tire contacting a shoulder of the tread portion. Applicant is incorrect. No contact between a shoulder of tread portion and the sidewall portion is illustrated in figure 1. The meaning of contacting therefore remains ambiguous.

As to claims 19 and 20, "according to claims 6" makes the dependency of these claims unclear.

In claims 21, 23, and 24, there is no antecedent basis for "said at least one exterior main groove" when it depends on claim 6. In the amendment filed 10-29-04, "at least one exterior main groove" in claim 6 was changed to --an exterior main groove--. It is unclear if the above noted inconsistency causes the dependent claim to broaden independent claim 6.

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5) Claims 26 and 27 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 26 can depend on claim 13. Claim 26 fails to further limit claim 13 because the description of "a height of said thin rib is made equal to said tread surface" removes the limitation of "a height of said thin rib is made lower than said tread surface".

Claim 27 can depend on claim 13. Claim 27 fails to further limit claim 13 because the description of "a height difference between the tip of said thin rib and said tread surface is set in a range of 0 to 4 mm" removes the limitation of "a height of said thin rib is made lower than said tread surface".

6) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Japan '413 (rib height equal to tread surface)

7) **Claims 6, 10, 19, 21-23 and 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan '413 (JP 7-117413) in view of Kukimoto et al (US 5445201).**

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Japan '413, directed to reducing uneven wear, discloses a heavy duty pneumatic tire comprising four main grooves 3 separating five ribs including a pair of shoulder ribs, a pair of intermediate ribs and a center rib. Each main groove 3 is arranged between a pair of narrow grooves. The narrow grooves have a width (e.g. 2 mm) less than the width of the main grooves. See figures and paragraph 10 of the machine translation. In figure 1, the narrow grooves have a straight configuration in cross section. More specifically, the narrow grooves have parallel and straight walls which are perpendicular to the tread surface. Japan '413 teaches that the narrow grooves may have different configurations other than the straight configuration shown in figure 1. In figure 3, Japan '413 shows different configurations for the narrow grooves. In configuration D, each narrow groove has one groove wall inclined inwardly from the tread surface to a curved bottom and the other wall inclined outwardly from the tread surface toward the curved bottom. One of ordinary skill in the art would readily understand that each of the five ribs may have the configuration D. In any event: It would have been an obvious alternative to form the narrow grooves in the figure 1 tire of Japan '413 such that all of the narrow grooves have the configuration D since (1) Japan '413 teaches using the same cross section for all of the narrow grooves and (2) Japan '413 suggests using a configuration D for the narrow grooves as an alternative to a straight line configuration. With respect to claim interpretation, the following comments are made: The claimed groove reads on *the combination of a shoulder main groove and narrow groove in the shoulder rib*. The claimed first wall reads on *the axially inner groove wall of the shoulder main groove*. The claimed second wall reads on *the axially outer wall of the*

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*narrow groove in the shoulder rib.* The claimed thin rib reads on *the rib formed between the shoulder main groove and the narrow groove in shoulder rib.* Claims 6 and 10 read on a thin rib having a height equal to the tread surface. Claims 6 and 10 fail to exclude forming a narrow groove in a second rib (intermediate rib). Japan '413 is silent as to using straight circumferential main grooves.

As to claims 6 and 10, it would have been an obvious to one of ordinary skill in the art to form Japan '413's main grooves as straight main grooves since Kukimoto et al, also directed to prevent wear in a heavy duty pneumatic tire, teaches using either straight or zigzag main grooves in such a tire.

As to claim 6 (the walls being parallel in the circumferential direction), note the suggestion from Kukimoto et al to use straight grooves (straight grooves have groove walls which are parallel in the circumferential direction).

As to claim 10 (the main grooves being straight grooves), note the suggestion from Kukimoto et al to use straight grooves.

Applicant argues that Japan '413 fails to disclose first and second groove walls that extend from the tread surface to the bottom of the exterior main groove. Applicant is incorrect. The claimed groove reads on *the combination of a shoulder main groove and narrow groove in the shoulder rib.* The claimed first wall reads on *the axially inner groove wall of the shoulder main groove.* The claimed second wall reads on *the axially outer wall of the narrow groove in the shoulder rib.* Both walls extend to the bottom of the combination of the shoulder main groove and the narrow groove.

Applicant appears to argue that Japan '413 fails to teach none of the plurality of main grooves being between the exterior main groove and the shoulder. Applicant is incorrect since Japan '413 teaches a shoulder rib between the exterior main groove and the shoulder.

Applicant's arguments at page 23 are incorrect since when configuration D is used for all of the ribs, the resulting tread has the claimed the first wall, second wall and space.

Applicant argues that Japan '413 fails to teach straight main grooves and Kukimoto et al fails to show outwardly inclined walls. In response to applicant's



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arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Furthermore, there is ample suggestion to use straight grooves in Japan '413's pneumatic heavy duty tire for reducing uneven wear since Kukimoto et al suggests using either straight or zigzag main grooves in a heavy duty tire tread.

As to claim 19, note the suggestion from Kukimoto et al to use straight grooves.

As to claims 21-23, see figure 3 configuration D of Japan '413.

With respect to claim 25, the tire also has a pair of bead cores each being located in a bead portion since the tire is a pneumatic tire having a carcass 9 and a belt 10. In any event: it would have been obvious to provide Japan '413's tire with a carcass, bead portions and bead cores as claimed since (1) Japan '413's tire is a pneumatic tire having a carcass 9 and (2) it is taken as well known / conventional per se in the tire art to provide such a tire with bead portions and bead cores so that the tire may be mounted on a rim.

As to claims 26-27, see figures 1-3, which show the rib having the same height as the tread surface.

As to claim 28, Japan '413 teaches a width of 2 mm.

8) **Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japan '413 in view of Kukimoto et al as applied above and further in view of the admitted prior art (specification page 1 lines 9-25, page 2 lines 1-4, page 9 lines 2-6).**

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Japan '413 is silent as to the grooves being wider after inflation.

The admitted prior art discloses a pneumatic tire having a ribbed tire having grooves whose width is widened during inflation wherein both groove walls are inclined at 80 degrees with respect to the tread surface. The admitted prior art appears to teach that uneven wear occurs with this tire.

As to claim 24, it would have been obvious to one of ordinary skill in the art to apply Japan '413's solution for uneven wear to a tire having grooves which widen after inflation since (1) Japan '413 suggests applying the disclosed narrow grooves 6 to a ribbed tire to prevent uneven wear and (2) the admitted prior art teaches using main grooves which widen after inflation in a tire and indicates uneven wear occurs with such a known tire.

Mamada et al (rib height equal to tread surface)

9) **Claim 6, 10, 19, 21-23 and 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mamada et al in view of Kukimoto et al (US 5445201).**

Mamada et al discloses a pneumatic radial tire having a tire size such as LSR 750 R16 14PR for a heavy load vehicles. Since the tire is a pneumatic radial tire, it has a carcass, bead portions and bead cores. The tire comprises a tread having a "narrow groove" 20, "generally U-shaped groove" 10 wherein the narrow groove 20 is inclined outward from the tread surface to a groove bottom. The claimed groove reads on the combination of the groove 20, the groove 10 and the rib therebetween wherein groove 20 has a width such as 2 mm and groove 10 has a width larger than that of groove 20. The claimed "thin rib" reads on the rib between groove 20 and groove 10. See figure 2.

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It is noted that Mamada et al's rib between grooves 10 and 20 is "thinner" than the rib between grooves 10 and 10. Mamada et al's rib between grooves 10 and 20 has a height equal to the tread surface. Claims 6 and 10 read on a thin rib have a height equal to the tread surface. Mamada et al is silent as to using straight main grooves.

As to claims 6 and 10, it would have been an obvious to one of ordinary skill in the art to form Mamada et al's main grooves as straight main grooves since Kukimoto et al, also directed to prevent wear in a heavy duty pneumatic tire, teaches using either straight or zigzag main grooves in such a tire.

As to claim 6 (the walls being parallel in the circumferential direction), note the suggestion from Kukimoto et al to use straight grooves (straight grooves have groove walls which are parallel in the circumferential direction).

As to claim 10 (the main grooves being straight grooves), note the suggestion from Kukimoto et al to use straight grooves.

Applicant argues that Mamada depicts a plurality of main wide zigzag grooves 10 along with an auxiliary narrow straight groove 20. More properly, Mamada teaches "a plurality of main grooves extending in a substantially circumferential direction of the radial tire" (col. 1 lines 55-56) and "at least one auxiliary groove ... extending in a substantially circumferential direction" (col. 1 lines 58-59). In view of (1) Mamada's use the *same* broad description of "extending in a substantially circumferential direction" for both the main grooves and the auxiliary groove and (2) Applicant's acknowledgement that Mamada et al teaches a straight auxiliary groove, Mamada et al's disclosure is not limited to using zigzag main grooves.

Applicant argues that Kukimoto fails to show the groove walls being inclined in the same direction as those of the claimed invention. More properly, Mamada clearly shows the groove walls being inclined in the same direction as those of the claimed invention. See figure 2. Also, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant's argument that Kukimoto et al does not show the wide groove being zigzag while the narrow groove is straight is off-point since the issue as to claims 6 and

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10 is whether or not it would have been obvious to use straight main grooves in Mamada et al. There is ample suggestion to use straight main grooves in the heavy duty tire tread of Mamada et al since Kukimoto et al suggests using either straight or zigzag main grooves in a heavy duty tire tread.

As to claim 19, note the suggestion from Kukimoto et al to use straight grooves.

As to claims 21-23, note figure 2 of Mamada et al.

As to claim 25, Mamada et al teaches a pneumatic radial tire.

As to claims 26-27, note figure 2 of Mamada et al.

As to claim 28, Mamada et al teaches a groove width of 2 mm for the narrow groove 20.

**10) Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mamada et al in view of Kukimoto et al as applied above and further in view of view of the admitted prior art (specification page 1 lines 9-25, page 2 lines 1-4, page 9 lines 2-6).**

As to claim 24, it would have been obvious to provide Mamada's grooves in the pneumatic tire such that they widen after inflation since the admitted prior art teaches that known pneumatic tire construction causes the grooves to widen after inflation. The motivation to use Mamada et al's teachings with grooves that widen is to improve wandering performance of a tire having grooves which widen after inflation.

admitted prior art (lower height rib)

**11) Claims 6, 10, 13, 19-25 and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art (specification page 1 lines 9-25, page 2 lines 1-4, page 9 lines 2-6) in view Kukimoto et al (US 5445201) and Kabe et al (US 5345988).**

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The admitted prior art discloses a pneumatic tire having a ribbed tire having grooves whose width is widened during inflation wherein both groove walls are inclined at 80 degrees with respect to the tread surface. The admitted prior art appears to teach that uneven wear occurs with this tire. A thin rib is not provided in the main groove. However, it would have been obvious to one of ordinary skill in the art to provide the grooves of the admitted prior art with a generally U-shaped main groove portion, a thin rib and a narrow groove portion since Kukimoto et al suggests using such a main groove configuration (see figures 19a, 19b) so that the tire has excellent uneven wear resistance. Furthermore, it would have been obvious to outwardly incline the narrow groove 4' in view of Kabe et al's teaching to incline a narrow groove adjacent a thin rib for preventing wear so that the thin rib is provided with a trapezoidal shape having a larger base to prevent the thin rib from being chipped off. **No unexpected results of uneven wear resistance over Kukimoto et al have been shown.** It is acknowledged that the trapezoidally shaped thin rib for preventing wear in Kabe et al is located on a center side instead of a shoulder side of the circumferential main groove. However, one of ordinary skill in the art, faced with the problem of preventing wear, is appraised from Kukimoto et al that the solution of a thin rib for preventing wear may be located at the shoulder side of the main groove (figure 19b) as an alternative to being located at the center side (figure 20b). One of ordinary skill in the art therefore would have been motivated from the applied prior art to use a thin rib at the shoulder side of the main groove and to form such a thin rib with a trapezoidal shape to improve uneven wear resistance (Kukimoto et al, Kabe et al) and to prevent chipping off of the thin rib (Kabe

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et al). The main groove portion in Kukimoto et al defines a larger space than that defined by the narrow groove portion.

As to claim 13, note the suggestion from Kukimoto et al to provide the rib with a lower height to form the stepped zone.

Applicant argues that Kukimoto fails to teach first and second groove walls outwardly inclined and Kabe et al teaches inwardly inclined wall instead of outwardly inclined wall. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). **When properly considered as a whole the applied prior art motivates one of ordinary skill in the art to form the admitted prior art's grooves with a thin rib to reduce wear (Kukimoto et al, Kabe et al) and to incline the walls of the thin rib to enlarge the base of the thin rib and prevent chipping (Kabe et al).** It is acknowledged that Kabe et al's rib is at an axially inner location. However, Kukimoto et al teaches that the rib (which like Kabe et al's rib functions to reduce wear) may be at either an axially inner or axially outer location.

The limitation of the main groove being straight would have been obvious in view of Kukimoto et al's teaching that the circumferential groove for the figure 19a, 19b embodiment is straight.

As to claim 6 (the walls being parallel in the circumferential direction), note the suggestion from Kukimoto et al to use straight grooves in the admitted prior art tire (straight grooves having groove walls which are parallel in the circumferential direction).

As to claim 10 (the main grooves being straight grooves), note the suggestion from Kukimoto et al to use straight grooves in the admitted prior art tire.

As to claim 19, note the suggestion from Kukimoto et al to use straight grooves.

As to claim 20, note the suggestion from Kukimoto et al to provide the rib with a lower height to form the stepped zone.

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As to claims 21-23, Kukimoto et al suggests using the rib near the shoulder for an exterior main groove where the walls extend to the bottom of the groove. See figures 19a and 19b.

As to claim 24, the admitted prior art teaches that the groove widens after inflation.

As to claim 25, it would have been obvious to provide the tire with a carcass, bead portions and bead cores as claimed since (1) Kukimoto's tire's tire is a pneumatic tire having a carcass 5 and (2) it is taken as well known / conventional per se in the tire art to provide such a tire with bead portions and bead cores so that the tire may be mounted on a rim.

As to claim 27, the limitation of the height difference being 0-4 mm would have been obvious and could have been determined without undue experimentation in view of Kukimoto et al's teaching to locate the top of the protrusion (stepped zone) slightly below the tread surface so that the protrusion (which may define a height difference of 2 mm) contacts the road so as to serve as an uneven wear sacrificed portion.

As to claim 28, the claimed width of 4 mm or smaller for the thin groove portion would have been obvious in view of Kukimoto et al's teaching that groove 4' is a narrow cut.

#### Remarks

12) Applicant's arguments filed 10-29-04 have been fully considered but they are not persuasive. Applicant's arguments are addressed above.

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Applicant requests a new non-final action if a new ground of rejection is made against claims 10 and 13 (page 17 of response filed 10-29-04). Claims 10 and 13 have not been rejected using a new ground of rejection.

Claims 19, 21 and 23 have not been objected to as failing to further limit since "The test is not one of whether the claims differ in scope." MPEP 608.01(n), page 600-80, Rev. 2, May 2004.

13) No claim is allowed.

14) Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. The new 112 second paragraph rejection of claim 19 for example was necessitated by amendment. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.



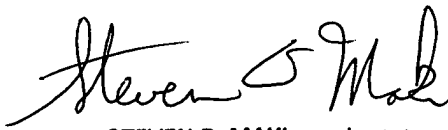
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15) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is (571) 272-1221. The examiner can normally be reached on Mon. - Fri. 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Steven D. Maki  
January 21, 2005

  
STEVEN D. MAKI 1-21-05  
PRIMARY EXAMINER  
~~GROUP 1300~~  
AU 1733